

Abstract

The object of this invention is to provide a method by which to form molecule recognizing films on sensor electrodes efficiently, within a short period, uniformly and in a high quality state. Another object of this invention is to provide a method by which to accurately introduce a vast number of biological samples for evaluation to the plural minute sensor electrode dots within a short period and efficiently.

In order to form organic thin films on electrodes, a solution of a material for the organic thin film is accurately printed via an ink-jet onto the surface of microelectrodes as required, thereby producing a high density array of microelectrodes. Further, a solution of a sample substance or a liquid substance to be sensed is ejected into air via an ink-jet nozzle to fall to the surface of organic thin membranes on the microelectrodes so that the sample ^{can be} is evaluated.